

**AMENDMENTS TO THE CLAIMS:** This listing of claims replaces all prior versions and listings of claims in the instant patent application.

**Listing of claims:**

1. (previously presented) A method of detecting Graves' disease in a patient comprising  
  
(a) obtaining a biological sample comprising fibroblasts from the patient, and  
  
(b) detecting in said biological sample the activation of fibroblasts by binding of disease specific IgG to the IGF-1 receptor (IGF-1R) relative to a control wherein presence of IgG-activated fibroblasts compared to the control indicates Graves' disease.
2. (cancelled)
3. (previously presented) The method of claim 1 wherein the detecting is accomplished by measuring the level of a chemical marker expressed by said IgG-activated T-cells fibroblasts in said biological sample, wherein an elevated level of the marker compared to the control indicates presence of said IgG-activated fibroblasts.
4. (original) The method of claim 3 wherein the marker is RANTES.
5. (previously presented) The method of claim 3 wherein the marker is IL-16.
6. (previously presented) The method of claim 2 wherein the detecting is accomplished by exposing T-cells to said biological sample comprising fibroblasts and measuring T-cell migration toward said fibroblasts, wherein an increase in the migration of said fibroblasts relative to the control indicates presence of said IgG-activated fibroblasts.
7. (original) The method of claim 1 wherein the patient is human.
8. (previously presented) The method of claim 1 wherein the biological sample is selected from a group consisting of: blood, urine, synovial fluid, ascites, and tissues.
9. (previously presented) A method of detecting the presence of antibody-activated fibroblasts, said method comprising  
(a) obtaining a biological sample comprising fibroblasts from the patient;  
(b) contacting said sample with an antibody specific for IL-16  
(c) detecting the level of IL-16 released by said fibroblasts relative to a control, wherein an

elevated level of IL-16 detects the presence of antibody-activated fibroblasts.

10. (previously presented) A method of detecting the presence of antibody-activated fibroblasts, said method comprising

- (a) obtaining a biological sample comprising fibroblasts from the patient;
- (b) contacting said sample with an antibody specific for RANTES;
- (c) detecting the level of RANTES released by said fibroblasts relative to a control, wherein an elevated level of RANTES detects the presence of antibody-activated fibroblasts.

11. (previously presented) A method of detecting the presence of antibody-activated fibroblasts, said method comprising

- (a) obtaining a biological sample comprising fibroblasts from the patient;
- (b) contacting said sample with antibodies specific for IL-16 and RANTES;
- (c) detecting the levels of IL-16 and RANTES released by said fibroblasts relative to a control, wherein an elevated level of both IL-16 and RANTES detects the presence of antibody-activated fibroblasts.